

OIPE

RAW SEQUENCE LISTING

DATE: 12/12/2001

PATENT APPLICATION: US/09/830,703

TIME: 11:51:43

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\12112001\I830703.raw

4 <110> APPLICANT: Biofrontera Pharmaceuticals AG
 5 Lubbert, Hermann
 7 <120> TITLE OF INVENTION: TRANSGENIC ANIMAL MODEL FOR
 8 NEURODEGENERATIVE DISEASES
 10 <130> FILE REFERENCE: STERN1.001APC
 12 <140> CURRENT APPLICATION NUMBER: 09/830,703
 C--> 13 <141> CURRENT FILING DATE: 2001-12-12
 15 <150> PRIOR APPLICATION NUMBER: EP 99116766.9
 16 <151> PRIOR FILING DATE: 1999-08-30
 18 <160> NUMBER OF SEQ ID NOS: 34
 20 <170> SOFTWARE: FastSEQ for Windows Version 4.0
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 23 <211> LENGTH: 3255
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 25 <213> ORGANISM: Mus musculus
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 30 cgggtgacct gatagtgtt gtcagggtca actccagcta tggcttccca gtggagggtcg 180
 31 attctgacac cagcatcttg cagctcaagg aagtgggtgc taagcgacag ggggttccag 240
 32 ctgaccagct gcgtgtgatt ttgcccggga aggagcttcc gaatcacctg acgggttcaaa 300
 33 actgtgacct ggaacaacag agtattgtac acatagtaca gagaccacgg aggagaagtc 360
 34 atgaaacaaa tgcattctga ggggacgaac cccagagcac ctgagagggc tccatatggg 420
 35 agtccaggag ctgacacga gtggacctga gcagccatac cctgccgggtg gactctgttg 480
 36 ggctggcggt cattctggac acagacagta agagggtatc agaagcagcc agagggtccag 540
 37 ttaaaccac ctacaacagc tttttcatct actgcaaagg cccctgccac aagggtccagc 600
 38 ctggaagact ccgagttcag tgtggcacct gcaaacaaagc aacctcacc ttggcccagg 660
 39 gcccatcttg ctgggacgat gtcttaattc caaacccgat gagtgggtgag tgccagtctc 720
 40 cagactgccc tggaccaga gctgaatttt tctttaaatg tggagcacac ccaacctcag 780
 41 acaaggacac gtcggtagct ttgaacctga tcaccagcaa caggcgagc atcccttgca 840
 42 tagcgtgcac agatgtcagg agccctgtcc tggctctcca gtgtaaccac cgtcacgtga 900
 43 tctgtttgga ctgtttccac ttgtattgtg tcacaagact caacgatcgg cagtttgtcc 960
 44 acgatgetca acttggttac tccctgccgt gtgtagctgg ctgtcccaac tccctgatta 1020
 45 aagagctcca tcacttcagg atccttgagg aagagcagta cactaggtac cagcagtatg 1080
 46 gggccgagga atgcgtgctg caaatgggag gtgtgctgtg ccccgctoct ggctgtggag 1140
 47 ctggactgct acctgaacag ggccagagga aagtcacctg cgaagggggc aacggcctgg 1200
 48 gctgcgggtt tgtttctgc cgggactgta aggaagcata ccatgaaggg gattgcgact 1260
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 54 gggaaactcc gaagattcct accttcttta gccatttctt cttctcgatg catataagca 1620
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 58 gaagccatga gtgagggtgg aagtgttttc cagggttgtt gccacgccct gggtaagtaa 1860

ENTERED

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Input Set : A:\seqlist.txt

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60 atcatctatt cccaaagggc cccctgcagt agtcaaaact atttgtttat cccccaaat 1980
61 cctatcttta caaatggtgc tgatgagatt acaacccctc tgtgtactaa tcagcttata 2040
62 aaccaagtga gaacctagga aagctaattg gatggcagac tgcttaaate gcagggagga 2100
63 ctcaagaagc aaacctactt ccgttcgttt cattatctgc aactttagaa agaaatgata 2160
64 tttttttccc cctgaaaaga taacaaagtc tgcaatttgg tttggagtat tctactgca 2220
65 gctggaagt ttagcttcac tgtgaattta acagagaaag tgccataaa gggggcggtt 2280
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67 ttatagaagg agcatccctc gacctctga atgagagtat gcctgacccc tccaccaca 2400
68 agtggggaca cctctgcata tctgctccct cctctgctgt taagccccag ggagcccat 2460
69 ccaccagtg gtcctacaga cagggaata cacacacacc aagatagcct tcagatcaac 2520
70 atgcatcaca ctcaagtgtt aatctttcaa ggttttcttt tcttttctt gttttttatt 2580
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73 ggcctaagtt cacacttttg tccagtggtc cctagactcc acccagccag cteccaaaat 2760
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85 <211> LENGTH: 1459
86 <212> TYPE: DNA
87 <213> ORGANISM: Mus musculus
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92 tgatagtgtt tgcaggttc aactccagct atggttccc agtggaggtc gattctgaca 180
93 ccagcatctt gcagctcaag gaagtgggtg ctaagcgaca gggggttcca gctgaccagc 240
94 tgcgtgtgat tttgcccgg aaggagcttc cgaatcacct gacggttcaa aactgtgacc 300
95 tggacaaca gagtattgta cacatagtag agagaccacg gaggagaagt catgaaaca 360
96 atgcatctgg aggggacgaa cccagagca cctcagaggg ctccatatgg gactccagga 420
97 gcttgacacg agtggacctg agcagccata cctgcccgtt ggactctgtg gggctggcgg 480
98 tcattctgga cacagacagt aagagggatt cagaagcagc cagaggtcca gcagttaaac 540
99 ccacctacaa cagctttttc atctactgca aaggcccttg ccacaaggte cagcctggaa 600
100 agctccgagt tcagtgtggc acctgcaaac aagcaaccct caccttggcc cagggcccat 660
101 cttgctggga cgatgtctta attccaaacc ggatgagtg tgagtgccag tctccagact 720
102 gccctggaac cagagctgaa tttttcttta aatgtggagc acaccaacc tcagacaagg 780
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107 gtctaccaa cccattacc tgggtgattt ctttaccgct tagcttctcc aagatgcta 1080
108 tttccacaca cagtttcttg tcttcccat cccccatag gtttatgcgc atgagtaagc 1140
109 accgcacctc atgagtttgt gcttctgata caagacttcc tgggatcccc gcttgagccc 1200

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110 tagaatcccc tggaaactggg ttcagtcacc tatottcaat agcctctttt aaaagtgagt 1260
 111 tcttgggctg gtgagatggc tcagtgggta agagcaccog actgctcttc cgaagtccag 1320
 112 agttcaaaat cccagcaacc acatgggtggc tcacaacccat ccgtaacaag atctgactcc 1380
 113 ctcttctggt gtgtctgaag acagctacag tgtacttaca taaaataata aataaatctt 1440
 114 aaaaaaaaaa aaaaaaaaaa 1459

116 <210> SEQ ID NO: 3

117 <211> LENGTH: 857

118 <212> TYPE: DNA

119 <213> ORGANISM: Mus musculus

121 <400> SEQUENCE: 3

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 124 gttcaactcc agctatggct tcccagtgga ggtcgattct gacaccagca tcttgcagct 180
 125 caaggaagtg gttgctaagc gacagggggg tccagctgac cagctgcgtg tgatttttgc 240
 126 cgggaaggag cttccgaatc acctgacggt tcaaaactgt gacctggaac aacagagtat 300
 127 tgtacacata gtacagagac cacggaggag aagtcatgaa acaaatgcat ctggagggga 360
 128 cgaaccccg agcacctcag agggctccat atgggagtc aggagcttga cagcagtgga 420
 129 cctgagcagc cataccctgc cgggtggactc tgtggggctg gcggtcattc tggacacaga 480
 130 cagtaagagg gattcagaag cagccagagg tccagcagtt aaacccacct acaacagctt 540
 131 tttcatctac tgcaaaggcc cctgccacaa ggtccagcct ggaaagctcc gagttcagtg 600
 132 tggcacctgc aaacaagcaa ccctcacctt ggcccagggc ccattctgct gggacgatgt 660
 133 cttaattcca aaccggatga gtggtgagtg ccagtctcca gactgccctg gaaccagagc 720
 134 tgaatttttc tttaaagtgt gagcacaccc aacctcagac aaggacacgt cggtagcttt 780
 135 gaacctgac accagcaaca ggcgacagat cccttgcata gcgtgcacag atgtcagggt 840
 136 tatgcgcatg agttagc 857

138 <210> SEQ ID NO: 4

139 <211> LENGTH: 464

140 <212> TYPE: PRT

141 <213> ORGANISM: Mus musculus

143 <400> SEQUENCE: 4

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 146 Val Asp Ser Asp Thr Ser Ile Leu Gln Leu Lys Glu Val Val Ala Lys
 147 20 25 30
 148 Arg Gln Gly Val Pro Ala Asp Gln Leu Arg Val Ile Phe Ala Gly Lys
 149 35 40 45
 150 Glu Leu Pro Asn His Leu Thr Val Gln Asn Cys Asp Leu Glu Gln Gln
 151 50 55 60
 152 Ser Ile Val His Ile Val Gln Arg Pro Arg Arg Arg Ser His Glu Thr
 153 65 70 75 80
 154 Asn Ala Ser Gly Gly Asp Glu Pro Gln Ser Thr Ser Glu Gly Ser Ile
 155 85 90 95
 156 Trp Glu Ser Arg Ser Leu Thr Arg Val Asp Leu Ser Ser His Thr Leu
 157 100 105 110
 158 Pro Val Asp Ser Val Gly Leu Ala Val Ile Leu Asp Thr Asp Ser Lys
 159 115 120 125
 160 Arg Asp Ser Glu Ala Ala Arg Gly Pro Val Lys Pro Thr Tyr Asn Ser
 161 130 135 140
 162 Phe Phe Ile Tyr Cys Lys Gly Pro Cys His Lys Val Gln Pro Gly Lys

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Input Set : A:\seqlist.txt

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163 145          150          155          160
164 Leu Arg Val Gln Cys Gly Thr Cys Lys Gln Ala Thr Leu Thr Leu Ala
165          165          170          175
166 Gln Gly Pro Ser Cys Trp Asp Asp Val Leu Ile Pro Asn Arg Met Ser
167          180          185          190
168 Gly Glu Cys Gln Ser Pro Asp Cys Pro Gly Thr Arg Ala Glu Phe Phe
169          195          200          205
170 Phe Lys Cys Gly Ala His Pro Thr Ser Asp Lys Asp Thr Ser Val Ala
171          210          215          220
172 Leu Asn Leu Ile Thr Ser Asn Arg Arg Ser Ile Pro Cys Ile Ala Cys
173 225          230          235          240
174 Thr Asp Val Arg Ser Pro Val Leu Val Phe Gln Cys Asn His Arg His
175          245          250          255
176 Val Ile Cys Leu Asp Cys Phe His Leu Tyr Cys Val Thr Arg Leu Asn
177          260          265          270
178 Asp Arg Gln Phe Val His Asp Ala Gln Leu Gly Tyr Ser Leu Pro Cys
179          275          280          285
180 Val Ala Gly Cys Pro Asn Ser Leu Ile Lys Glu Leu His His Phe Arg
181          290          295          300
182 Ile Leu Gly Glu Glu Gln Tyr Thr Arg Tyr Gln Gln Tyr Gly Ala Glu
183 305          310          315          320
184 Glu Cys Val Leu Gln Met Gly Gly Val Leu Cys Pro Arg Pro Gly Cys
185          325          330          335
186 Gly Ala Gly Leu Leu Pro Glu Gln Gly Gln Arg Lys Val Thr Cys Glu
187          340          345          350
188 Gly Gly Asn Gly Leu Gly Cys Gly Phe Val Phe Cys Arg Asp Cys Lys
189          355          360          365
190 Glu Ala Tyr His Glu Gly Asp Cys Asp Ser Leu Leu Glu Pro Ser Gly
191          370          375          380
192 Ala Thr Ser Gln Ala Tyr Arg Val Asp Lys Arg Ala Ala Glu Gln Ala
193 385          390          395          400
194 Arg Trp Glu Glu Ala Ser Lys Glu Thr Ile Lys Lys Thr Thr Lys Pro
195          405          410          415
196 Cys Pro Arg Cys Asn Val Pro Ile Glu Lys Asn Gly Gly Cys Met His
197          420          425          430
198 Met Lys Cys Pro Gln Pro Gln Cys Lys Leu Glu Trp Cys Trp Asn Cys
199          435          440          445
200 Gly Cys Glu Trp Asn Arg Ala Cys Met Gly Asp His Trp Phe Asp Val
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205 <211> LENGTH: 262
206 <212> TYPE: PRT
207 <213> ORGANISM: Mus musculus
209 <400> SEQUENCE: 5
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212 Val Asp Ser Asp Thr Ser Ile Leu Gln Leu Lys Glu Val Val Ala Lys
213          20          25          30
214 Arg Gln Gly Val Pro Ala Asp Gln Leu Arg Val Ile Phe Ala Gly Lys

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215          35          40          45
216 Glu Leu Pro Asn His Leu Thr Val Gln Asn Cys Asp Leu Glu Gln Gln
217          50          55          60
218 Ser Ile Val His Ile Val Gln Arg Pro Arg Arg Arg Ser His Glu Thr
219 65          70          75          80
220 Asn Ala Ser Gly Gly Asp Glu Pro Gln Ser Thr Ser Glu Gly Ser Ile
221          85          90          95
222 Trp Glu Ser Arg Ser Leu Thr Arg Val Asp Leu Ser Ser His Thr Leu
223          100          105          110
224 Pro Val Asp Ser Val Gly Leu Ala Val Ile Leu Asp Thr Asp Ser Lys
225          115          120          125
226 Arg Asp Ser Glu Ala Ala Arg Gly Pro Ala Val Lys Pro Thr Tyr Asn
227          130          135          140
228 Ser Phe Phe Ile Tyr Cys Lys Gly Pro Cys His Lys Val Gln Pro Gly
229 145          150          155          160
230 Lys Leu Arg Val Gln Cys Gly Thr Cys Lys Gln Ala Thr Leu Thr Leu
231          165          170          175
232 Ala Gln Gly Pro Ser Cys Trp Asp Asp Val Leu Ile Pro Asn Arg Met
233          180          185          190
234 Ser Gly Glu Cys Gln Ser Pro Asp Cys Pro Gly Thr Arg Ala Glu Phe
235          195          200          205
236 Phe Phe Lys Cys Gly Ala His Pro Thr Ser Asp Lys Asp Thr Ser Val
237          210          215          220
238 Ala Leu Asn Leu Ile Thr Ser Asn Arg Arg Ser Ile Pro Cys Ile Ala
239 225          230          235          240
240 Cys Thr Asp Val Ser His Leu Pro Leu Ser Ser Gly Ala Ser Val Trp
241          245          250          255
242 Thr Arg Pro His Leu His
243          260
246 <210> SEQ ID NO: 6
247 <211> LENGTH: 250
248 <212> TYPE: PRT
249 <213> ORGANISM: Mus musculus
251 <400> SEQUENCE: 6
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254 Val Asp Ser Asp Thr Ser Ile Leu Gln Leu Lys Glu Val Val Ala Lys
255          20          25          30
256 Arg Gln Gly Val Pro Ala Asp Gln Leu Arg Val Ile Phe Ala Gly Lys
257          35          40          45
258 Glu Leu Pro Asn His Leu Thr Val Gln Asn Cys Asp Leu Glu Gln Gln
259          50          55          60
260 Ser Ile Val His Ile Val Gln Arg Pro Arg Arg Arg Ser His Glu Thr
261 65          70          75          80
262 Asn Ala Ser Gly Gly Asp Glu Pro Gln Ser Thr Ser Glu Gly Ser Ile
263          85          90          95
264 Trp Glu Ser Arg Ser Leu Thr Arg Val Asp Leu Ser Ser His Thr Leu
265          100          105          110
266 Pro Val Asp Ser Val Gly Leu Ala Val Ile Leu Asp Thr Asp Ser Lys

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VERIFICATION SUMMARY

DATE: 12/12/2001

PATENT APPLICATION: US/09/830,703

TIME: 11:51:44

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\12112001\I830703.raw

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date

STATISTICS SUMMARY

PATENT APPLICATION: US/09/830,703

DATE: 12/12/2001

TIME: 11:51:44

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\12112001\I830703.raw

Application Serial Number: US/09/830,703

Alpha or Numeric: Numeric

Application Class:

Application File Date: 12-12-2001

Art Unit: OIPE

Software Application: FastSeq

Total Number of Sequences: 34

Total Nucleotides: 48922

Total Amino Acids: 3874

Number of Errors: 0

Number of Warnings: 0

Number of Corrections: 1

MESSAGE SUMMARY

271 C: 1 (Current Filing Date differs)